Project proposal:

Stack Focus: The focus is going to be a balanced app as I feel I need to practice all parts of building an app to get a good grasp of full-stack engineering.

Tech Stack:

- Frontend: HTML, CSS, JavaScript (for recipe submission and filtering)
- Backend: Python/Flask, SQLAlchemy, Jinja, WTForms (for submitting recipes)
- Database: PostgreSQL
- Deployment: Render

Type: This will be a website

Goal: The goal is to have a site that can provide a user profile to keep track of their favorite food recipes. They can rate and create their own recipes as well as search for new recipes. (Stretch Goal is to create a method to schedule food sharing with friends)

Users: Anyone interested in finding recipes and an easy way to schedule food sharing with their friends.

Data: I will use an external API spoonacular. This API has the ability to search for recipes and help with meal planning which may help with my food sharing function idea. Seems like the most robust API available for free.

Schema:

Users: (id, username, email, password, bio, profile_image_url, created_at)
Recipes: (id, user_id, spoonacular_id, title, ingredients, instructions, image_url, source_url, is_public, created_at)
Favorites: (id, user_id, recipe_id, favorited_at)
Ratings: (id, user_id, recipe_id, rating, review, rated_at)
Friends: (id, user_id, friend_id, status, created_at)
Meal_Trades: (id, sender_id, recipient_id, recipe_id, status, trade_date, created_at)

Issues with API: Complexity of data and making sure I can get all of my functions to work properly.

Data Sensitivity: There isn't any data that needs to be secured other than the login information (email and password).

Functionality: Search for and create recipes, create an account, follow/friend other users, and submit meal trade requests.

User Flow: A user can go to the site and search for recipes. When the user tries to create or favorite a recipe they should be prompted to log in/create an account. From the account page you will be able to search for other users and send friend requests. The user will also be able to go to a page where they can send a meal trade request with any friends in their list.

The Stretch goal here is the meal trade request with friends. The idea is that users will pick a recipe or create their own recipe and then send a meal trade request to another user in their friend list. This request should help the two parties coordinate cooking and sharing their meals with each other.